

LUCAS COUNTY OHIO

Keith G. Earley
Lucas County Engineer, P.E./P.S.



LUCAS COUNTY ENGINEER'S 2015 ANNUAL REPORT



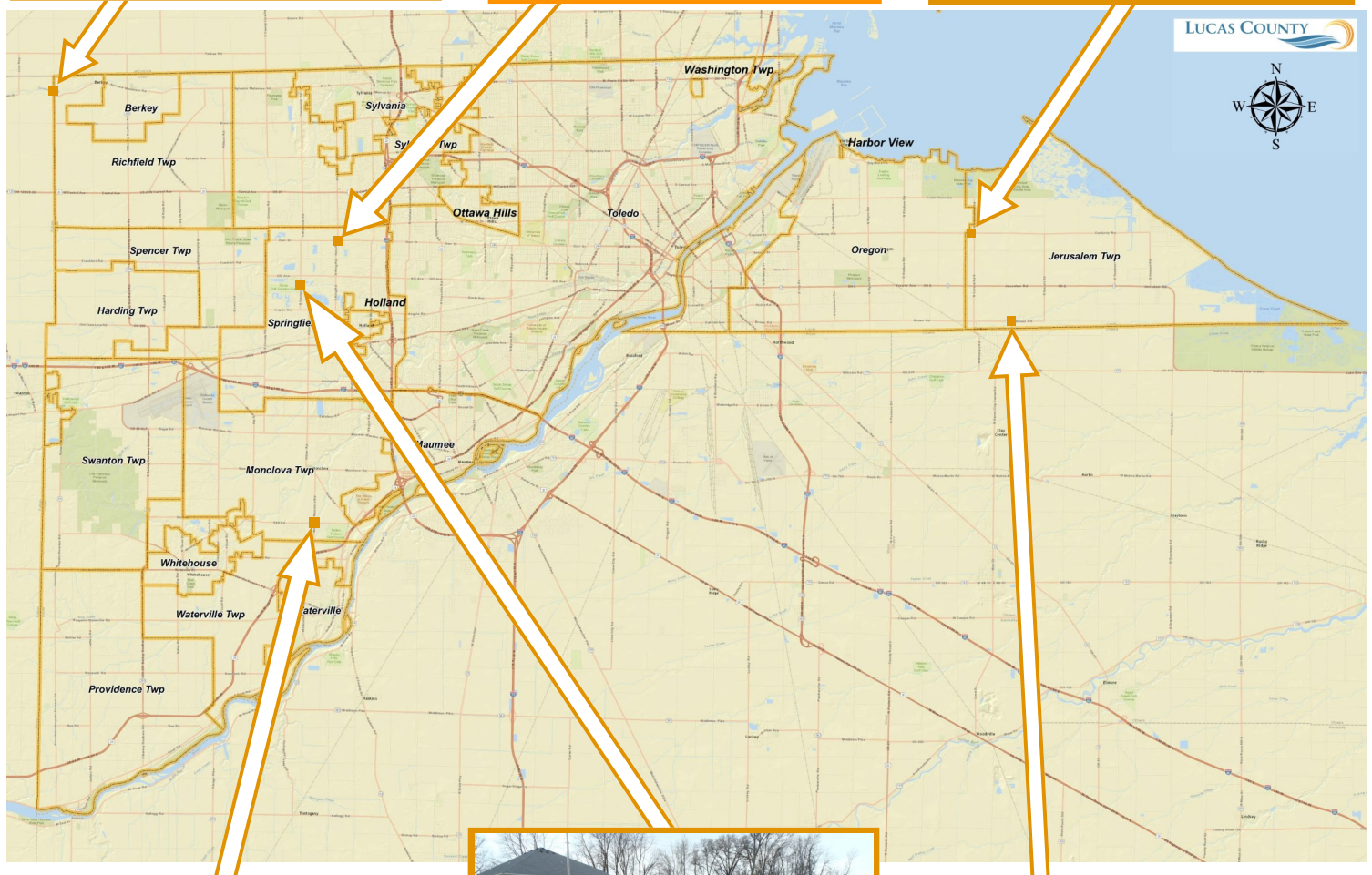
Fulton Lucas Road
Bridge #1



Dorr Street & King Road
Roundabout



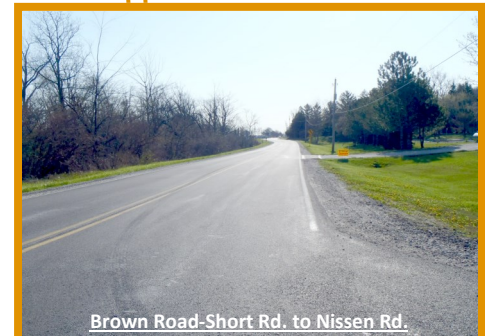
Corduoy Road—City of Oregon to Decant Rd.



Stitt Road & Waterville-Monclova Road
Roundabout



Centennial Road Bridge #543



Brown Road-Short Rd. to Nissen Rd.

Lucas County Engineer's Office

1049 S. McCord Road
Holland, Ohio 43528
Phone: 419-213-2860

Tax Map Department

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Toledo, Ohio 43604-2258
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Keith G. Earley, P.E., P.S.
Lucas County Engineer

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RESPONSIBILITIES OF THE LUCAS COUNTY ENGINEER'S OFFICE

1. Inspection, maintenance, repair, widening, resurfacing and reconstruction of pavements and storm drainage for the Lucas County Highway System. Road maintenance duties include traffic control, safety projects, mowing, snow removal, bridge/culvert maintenance, berming, pavement repair, roadside ditch and storm drainage improvements and similar functions.
2. Maintaining public surveying records, bridge/culvert data, property tax maps and the County/Township's road, culvert and drainage records.
3. Advising and providing engineering/surveying services to the eleven (11) Townships in regard to maintenance, construction and repair of the Township Highway System.
4. Overseeing design and construction of new subdivisions and reviewing site plans and permits for development projects in the Townships.
5. Inspection, repair, reconstruction and replacement of bridges on the County and Township roadway systems.
6. Maintaining and repairing ditches and retention areas that have been petitioned by affected property owners. Working with the Toledo Area Sanitary District on needed ditch cleanouts.
7. Administering District 12's (Lucas County) Program for the Ohio Public Works Commission to implement the State Capital Improvement Program, and the Transportation Improvement Program.
8. Participating by co-operative agreements, in certain road and bridge projects with the Townships, Cities and Villages of the County.
9. Managing the Lucas County Phase 2 Storm Water District

2015 ANNUAL REPORT

To: The Honorable Board of County Commissioners & the Citizens of Lucas County

The purpose of this report is to discuss the current condition of our highway system, significant projects completed, underway, and planned, and to discuss the long term outlook and needs.

Current Conditions

Currently, more than half of the 303 centerline miles of county maintained roads have paved shoulders, 2 to 10 feet wide on each side, and many of the deeper roadside ditches have been enclosed for additional safety. Additional lanes have been added to accommodate increased traffic, and we currently maintain 656 lane miles. Most all of the pavements are in relatively good condition with very few potholes or other forms of significant distress. Out of all of our bridges, only one is posted for a reduced load limit. Many improvements have been made to our traffic signals and all have energy efficient LED bulbs with battery backup for power outages. Most of our signing has been recently upgraded and in very good condition. Numerous improvements at intersections have been made over the past fifteen years resulting in minimal delay at most intersections. More improvements are needed, but overall, the system is in relatively good condition.

Highlighted Projects Constructed in 2015

Intersection Improvements with Roundabouts

These modern roundabouts were constructed to address the impact brought on by increased traffic, backups and delays. In addition to the improved operation, capacity, and overall safety associated with the construction of a modern roundabout, these projects also incorporated improvements to the roadway, storm sewer systems, and traffic controls.

Total Project Cost

Federal Funds: \$ 1,393,412

OPWC Funds: \$ 675,707

Local Funds: \$ 276,165

Total Cost: \$ 2,345,284



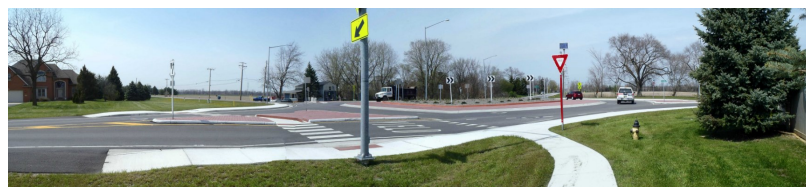
Dorris Street and King Road Roundabout
Panoramic View



Dorris Street and King Road Roundabout



Stitt Road and Waterville Monclova Road
Roundabout



Stitt Road and Waterville Monclova Road
Roundabout—Panoramic View

2015 Annual Resurfacing Program-10.62 mi.

Approximately half of the County projects let to construction in 2015 were devoted to road resurfacing. The following list of roads were selected to ensure that most of the county was represented in this annual resurfacing program:

1. Brint Road (Kilburn Road to 0.69 mile east of Holt Road)*
2. Brown Road (Short Road to Nissen Road)*-See Pg. 14
3. Garden Road (Albon Road to Gunn Road ~ 4' Paved Berms only)*
4. Geiser Road (0.18 mile west of Crissey Road to 0.21 mile east of Crissey Road)
5. Stiles Road (SR 295 to Heller Road)*
6. Corduroy Road (City of Oregon Limit to Decant Road)*-See pg. 14
7. Dorr Street (McCord Road to City of Toledo Limit)*
8. Sylvania-Metamora Road (Fulton-Lucas Road to State Route 295)*
9. Whiteford Road (North of Summerfield Road to Monroe Street)

Total Project Cost

OPWC Funds: \$ 657,422

Engineer Funds: \$ 2,118,231

Total Cost: \$ 2,775,653

*Brint Road

Before



After



*Garden Road

Before



After



*Stiles Road

Before



After



*Dorr Street

Before



After



*Sylvania-Metamora Road

Before



After



2015 Microsurfacing Program-3.61 mi.

- Centennial Road (Deerpointe Drive to Central Avenue)
- Crissey Road (Bancroft Street to Central Avenue)*
- Dorr Street (150' +/- east of King Road (N) to 5,100' +/- east of King Road (N))
- North Curtice Road (Ottawa Co. Line to Cedar Point Rd.)
- Weckerly Road (Monclova Road to US 20A)

Total Project Cost

Engineer Funds: \$ 235,904

*Crissey Road

Before



After



2015 Emulsified Seal Coat Program-6.2 mi.

- Brint Road (250'+/- east of Mitchaw Road to Centennial Road)
- Dorr Street (Schwamberger Road to Irwin Road)*
- Providence-Neapolis-Swanton Road (Hite Road to SR 64)
- Sylvania Avenue (Fulton-Lucas Road to SR 295)

Total Project Cost

Engineer Funds: \$ 257,989

*Dorr Street

Before



After



2015 Chip Seal Project -8.8 mi.

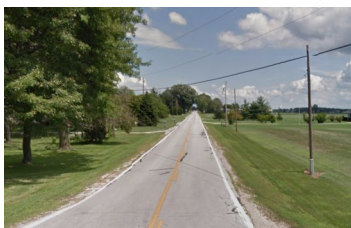
- Cedar Point Road—Cousino Road to Decant Road
- Garden Road—Shaffer Road to Whitehouse-Spencer Road
- Grand Rapids Road—S. River Road to Ludwig Road
- Ludwig Road—S. River Road to Jeffers Road
- Lathrop Road—Frankfort Road to Sylvania Avenue
- Schadel Road—Neowash Road to Neapolis-Waterville Road
- Shaffer Road—Garden Road to Whitehouse-Spencer Road
- Veller Road—Lyon Road to Elliston Road*

Total Project Cost

Engineer Funds: \$ 251,003

*Veler Road

Before



After



Significant ODOT Projects within Lucas County

2016

U.S. 20A/State Route 2

A district allocation funded project to resurface U.S. 20A/S.R. 2 in Lucas County from Turtle Creek to S.R. 64.

Airport Highway (State Route 2)

A multi-lane district allocation funded project to resurface SR-2 in Lucas County from near the Turnpike to near Holloway Road.

U.S. 20 (Central Avenue)

A district allocation funded program to resurface US-20 from Fulton County Line to near King Rd.

2017

State Route 2 (Jerusalem Township)

A 2 lane district allocation funded project to resurface SR-2 in eastern Lucas County from North Curtice Rd. to near Ottawa County Line.

State Route 295 (Berkey Southern Road)

A 2 Lane district allocation funded project to resurface SR-295 in Lucas County from Sylvania Ave to Michigan State Line.

State Route 295 (Berkey Southern Road)

A district allocation funded project to resurface S.R. 295 in Lucas County from S. River Rd. to S.R. 64.

State Route 64

A 2 Lane district allocation funded project to resurface SR-64 in Lucas County from approx. 0.16 E. of approx. E. of Finzel Rd. to approx. 0.3 mi. E. of Noward Rd. and from P.N.S. Rd. to S.R. 295.

Long Term Outlook

Our roadway system of 303 miles is currently in good condition. In 2015, we paved approximately 11 miles. We will pave 12.2 miles in 2016 and 13.2 miles in 2017. We can maintain our roadway system's good condition if we do 35 miles of preventative maintenance and 15 miles of rehabilitation and reconstruction miles per year within the 5-year C.I.P. **We are projecting an average of 12 miles of resurfacing and 34 miles of preventative maintenance per year for the next five years (2016 – 2020).** Depending on what other improvements are planned for any given year, road construction miles will vary.

Our bridges and culverts are in good condition as well. Many of our bridges and culverts have been replaced and/or repaired with prior road construction projects. There are currently 6 major bridge replacement projects scheduled to be let in the next 5-year period. These particular bridges will be stand alone construction projects. Matching funds from outside sources have helped increase our construction output over the past several years, and our continuous effort to secure additional matching funds for 2014 and beyond is a necessity if we are to maintain our system and try to keep up with inflation and high fuel costs. For our 5-year C.I.P budget (2014 – 2018) approximately 40.5% will be matching funds from other public agencies:

| | |
|------------------------------|----------------------|
| Federal Funds | \$32,500,000 |
| Ohio Public Works Commission | \$ 7,700,000 |
| Other Agencies | \$ 3,400,00 |
| | \$43,600,000* |

*This amount includes the Federal dollars for the McCord Road Grade Underpass Project.

McCord Road Underpass Project

The following are the highlights of construction that has begun on and scheduled for the completion of the McCord Road Underpass Project:

- The Beaver Excavating Company began construction of the McCord Road Grade Separation Project on August 11, 2014.
- Relining of the 66" Sanitary Sewer under McCord Road completed.
- Construction of the railroad underpass Underway.
- Project Construction to be completed by October 15 of 2016.



Concrete Walls & Forms for Underpass in place—
North side of Underpass on McCord Road



Panoramic view of the Roundabout—South side of Underpass
at McCord Road & Hall St./N. Mall Dr.



The first of 18 steel beams being delivered and installed
at the Railroad Bridge Underpass

COUNTY PROJECTS AWARDED IN 2015

| PROJECT NAME | PROJECT MGR. | PROJECT LET DATE | CURRENT ENGINEER ESTIMATE | AWARDED CONTRACTOR | AWARDED AMOUNT |
|---|--------------|------------------------|---------------------------|----------------------------------|---------------------|
| Dorr Street @ King Road Roundabout | DJP | LET 02/18/15 | \$ 1,105,071 | Schoen, Inc. | \$ 833,592.15 |
| Chip Seal Program (8.8 miles) | JSP | LET 02/18/15 | \$ 228,829 | Henry W. Bergman, Inc. | \$ 245,851.60 |
| Stitt Road @ Waterville Monclova Road Roundabout | RLM | LET 02/25/15 | \$ 661,532 | Gerken Paving, Inc. | \$ 617,116.95 |
| Washburn Road Bridge #4 Replacement Project | BAZ | LET 03/04/15 | \$ 454,037 | R.G. Zachrich Construction, Inc. | \$ 433,237.56 |
| Annual Crack Seal Program (LCE only) (26 miles) | JSP | LET 03/04/15 | \$ 180,000 | WL Markers, Inc. | \$ 215,985.00 |
| Culvert Extension Project #924 | PMO | Quotes Due 04/10/15 | \$ 30,403 | Schoen, Inc. | \$ 22,781.20 |
| 2015 OPWC Resurfacing Program Corduroy Road, Dorr Street, Sylvania Metamora Road, Whiteford Road (5.05 miles) | JML | LET 06/03/15 | \$ 1,579,450 | The Shelly Company | \$ 1,413,120.78 |
| Centennial Road Bridge #543 Replacement Project | BAZ | LET 07/01/15 | \$ 400,000 | Vernon Nagel, Inc. | \$ 281,853.42 |
| 2015 Annual Resurfacing Program Brint Road, Brown Road, Garden Road paved berm, Geiser Road, Stiles Road (5.57 miles) | JSP | LET 07/01/15 | \$ 1,310,000 | Gerken Paving, Inc. | \$ 1,251,782.50 |
| Annual Emulsified Seal Coat Program (6.2 miles) | JSP | LET 07/01/15 | \$ 259,000 | Roadway Services, Inc. | \$ 232,431.82 |
| 2015 Milling Project | GW | LET 07/01/15 | \$ 64,000 | Ebony Construction Company, Inc. | \$ 51,925.00 |
| 2015 Culvert Program (#280 & #239) | PMO | LET 08/12/15 | \$ 113,000 | PHC, Inc. | \$ 97,822.40 |
| 2015 Microsurfacing Program (4.27 miles) | JSP | LET 08/12/15 | \$ 219,000 | American Pavements, Inc. | \$ 206,209.00 |
| 2015 Guardrail Improvements | DJP | LET 09/02/15 | \$ 238,800 | Lake Erie Construction | \$ 228,695.00 |
| 2015 Raised Pavement Marker Program | KPW | Quotes Due 09/15/15 | \$ 34,032 | A & A Safety | \$ 25,295.35 |
| 2015 Thermoplastic Pavement Markings | KPW | Quotes Due 09/15/15 | \$ 28,536 | A & A Safety | \$ 20,881.20 |
| TOTALS | | | \$ 6,905,690 | | \$ 6,178,581 |

CONSTRUCTION FOR 2015

Bid by Townships ~ Design & Inspection performed by County Engineer

| PROJECT NAME | PROJECT MANAGER | PROJECT LET DATE | CURRENT ENGINEER ESTIMATE | AWARDED CONTRACTOR | AWARDED AMOUNT |
|---|-----------------|------------------|---------------------------|-------------------------------------|----------------|
| 2015 Resurfacing Project (Valhalla Subdivision & Stillwater Subdivision) (Monclova Township) | SLR | LET 01/28/15 | \$ 438,629 | Gerken Paving, Inc. | \$ 413,531.36 |
| 2015 OPWC Road Improvements (Nightingale, Wynbrook Farms, The Quarry, The Beach Club at the Quarry, Saw Mill Run & Fox Run Subdivisions) (Springfield Township) | SLR | LET 02/25/15 | \$ 780,391 | Bowers Asphalt & Paving, Inc. | \$ 697,565.75 |
| Schwamberger Road OPWC Reclamation Project (Joint with Harding Township) (To be bid by LCE) (Spencer Township) | SLR | LET 03/04/15 | \$ 356,380 | Crestline Paving & Excavating, Inc. | \$ 318,435.20 |
| Annual Crack Seal Project Bid w/ LCE (Monclova Township) | JSP | LET 03/04/15 | \$ 33,000 | WL Markers, Inc. | \$ 29,500.00 |
| Annual Crack Seal Project Bid w/ LCE (Jerusalem Township) | JSP | LET 03/04/15 | \$ 18,000 | WL Markers, Inc. | \$ 15,500.00 |
| Annual Crack Seal Project Bid w/ LCE (Harding Township) | JSP | LET 03/04/15 | \$ 15,000 | WL Markers, Inc. | \$ 12,485.00 |
| 2015 Concrete Repair Project (Sylvania Township) | SLR | LET 05/12/15 | \$ 120,464 | B & J Concrete & Construction, Inc. | \$ 116,611.25 |
| Van Dyke Resurfacing Project (Jerusalem Township) | SLR | LET 06/23/15 | \$ 183,323 | Gerken Paving, Inc. | \$ 169,771.55 |
| 2015 OPWC Road Improvements (Deer Hollow Subd, Wicklow Woods Subd, Olander West Subd, Pacesetter Blvd, Port Sylvania & Meijer Dr.) (Sylvania Township) | SLR | LET 06/30/15 | \$ 465,583 | Gerken Paving, Inc. | \$ 418,107.10 |
| 2015 Cobblestones Subdivision Resurfacing Project (Cobblestones Plat 2, 4, 5, 6, & 7 & Woodstream West Plat 5) (Sylvania Township) | SLR | LET 06/30/15 | \$ 172,521 | Gerken Paving, Inc. | \$ 156,200.00 |
| Annual Microsurfacing Project Bid w/ LCE (Monclova Township) | JSP | LET 08/12/15 | \$ 20,270 | American Pavements | \$ 17,891.76 |

TOTALS \$ 2,950,636

\$ 2,980,905.12



Before

Van Dyke Ave.
Resurfacing
(Jerusalem Township)

10



After

Expenses, Revenue & CIP

Detailed information regarding our Revenue, Expenses & the Capital Improvement Program (CIP) over the past fifteen years is provided on pages 12 and 13.

Expenses

Since many capital improvement costs such as asphalt resurfacing have risen dramatically over the past 15 years, we have devoted a larger proportion of our revenue to those needed capital improvements. Our operating costs include maintenance activities such as snow and ice control, mowing, forestry, pot-hole filling, drainage repairs etc. The cost of performing those activities has increased with rising fuel costs, higher salt costs, increased utility costs and increased labor costs, but we have tried to control those costs as much as possible. Between 2009-2015, we spent on average, 69% of our revenue on capital improvements; previously we were spending around an average of 55% on capital improvements.

Dedicated Revenue

All of the dedicated revenue for Lucas County maintained roads and bridges come from motor vehicle license plate fees and a portion of the state gas tax. We receive no income from other taxes, such as property taxes. Our total dedicated revenue in 2015 (\$11.66 Million) is only 6% more than the \$11.0 Million received in 2000, while costs have nearly doubled.

The primary source of dedicated revenue (80%) is from motor vehicle license plate fees. The blue line on page 12 shows that revenue. In 2000 we received \$9.6 Million and in 2015 we received \$9.3 Million. Evidently businesses are not licensing as many vehicles and many families are going without that second or third vehicle.

The other source of dedicated revenue is a portion of the state gas tax, the purple line on page 12 shows that revenue. In 2000 we received \$1.4 Million and in 2015 we received \$2.3 Million. The state gas increased from 22 cents per gallon in 2003 to 28 cents per gallon in 2007. However, revenue from gas tax has declined since 2007, primarily because of more fuel efficient vehicles.

Dedicated revenue in the future is expected to be flat or slightly declining without any increases in the license plate fees or state gas tax.

Outside Revenue

Over the past 15 years, we have averaged receiving \$1.4 Million per year in federal grants plus \$1.9 Million per year in Ohio Public Works Commission (OPWC) grants or loans for specific capital improvement projects.

Federal funding has been used to replace structurally deficient or functionally obsolete bridges in poor condition. We have utilized all federal funds available over the past fifteen years, but very few of our bridges are likely to be eligible for several years. Roadway improvements on federal aid routes are eligible for federal funding, but very limited funds are available. We have utilized federal funds on safety projects, such as modern roundabouts at high crash intersections, when qualified.

We will continue to pursue all outside funding available, but the amount of available grants could decline. We are using about 93% outside funding on our \$36.5 Million McCord Road underpass, but no similar projects are planned in the near future.

State funding for the next ten years of the OPWC program was recently approved at the May 2014 Primary Election, so that program will continue, but this is a very competitive program. Considering the infrastructure needs of all public agencies in Lucas County, we expect to receive less than the \$1.9 Million per year that we have averaged over the past 15 years.

EXPENSES

| | | <u>1999-2003</u> | | <u>2004-2008</u> | | <u>2009-2013</u> | | <u>2014-2018</u> |
|-----------|----|------------------|----|------------------|----|------------------|----|------------------|
| Operating | \$ | 36,011,574 | \$ | 33,184,708 | \$ | 27,918,421 | \$ | 31,530,579 |
| C.I.P. | \$ | 43,015,029 | \$ | 46,765,736 | \$ | 64,477,316 | \$ | 65,414,756 |
| | \$ | 79,026,603 | \$ | 79,950,444 | \$ | 92,395,737 | \$ | 96,945,335 |

REVENUE

| | | | | | | | | |
|-----------------------|----|------------|----|------------|----|------------|----|------------|
| Outside | \$ | 18,304,734 | \$ | 18,171,452 | \$ | 30,160,808 | \$ | 32,707,922 |
| Dedicated | \$ | 57,409,727 | \$ | 62,344,807 | \$ | 59,647,929 | \$ | 57,207,639 |
| Carryover/ Reserve | \$ | 3,312,142 | \$ | | \$ | 2,587,000 | \$ | 7,029,774 |
| | \$ | 79,026,603 | \$ | 80,516,259 | \$ | 92,395,737 | \$ | 96,945,335 |

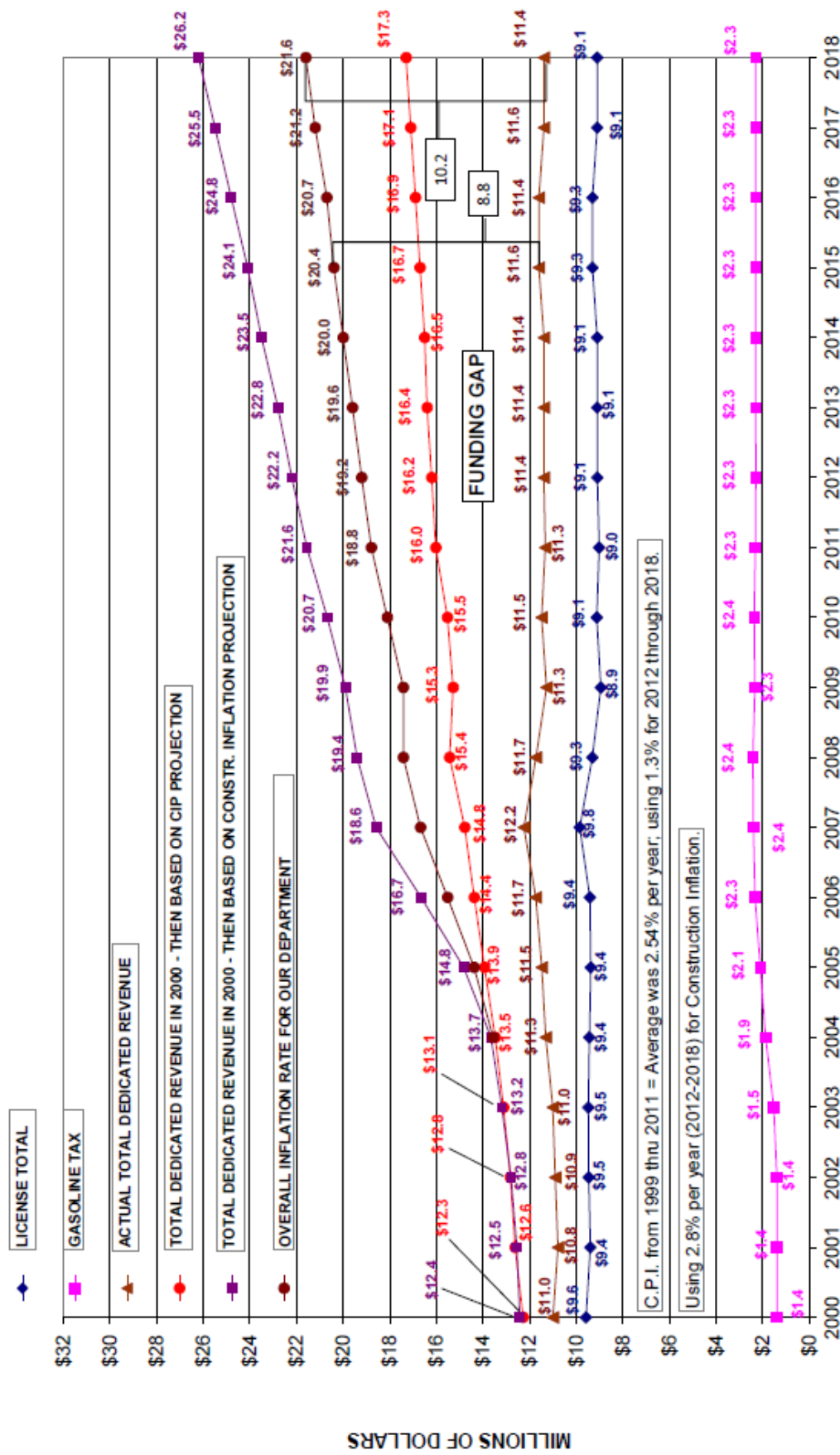
C.I.P.

| | <u>1999-2003</u> | <u>2004-2008</u> | <u>2009-2013</u> | <u>2014-2018</u> |
|--|------------------|------------------|------------------|------------------|
| Bridge Repairs | 9(6) | 5(6) | 11(6) | 3(3) |
| Bridge Replacements | 15(10) | 7(6) | 6(6) | 6(6) |
| Road Rehabilitation/ Reconstruction | 104(75) | 74(75) | 81(75) | 71(75) |
| Road Preservation | 132(175) | 169(175) | 215(175) | 168(175) |
| Drainage | 11(10) | 7(10) | 15(10) | 14(10) |
| Intersections | 6(3) | 5(3) | 5(3) | 7(3) |
| Signals/Upgrades | 9(2) | 5(2) | 26(2) | 1(2) |
| Traffic-Annual Programs | 10(8) | 12(8) | 9(8) | 7(5) |

(j) Stated Goals

License/Gasoline Tax History and Projections - Gap in Dedicated Funds

All dedicated funding for Lucas County maintained roads and bridges comes from Motor Vehicle License Plate fees and a portion of the Ohio Gasoline Tax. In 2015, Lucas County received \$9.3 million from license plates, \$260,000 less than received in 2000. In 2015, Lucas County received \$2.3 million from the gas tax, making the total dedicated funding \$11.6 million, which was \$640,000 more than the \$10.96 million received in 2000, but approximately \$660,000 less compared to 2007 when the dedicated funding peaked at \$12.26 million.



While dedicated revenue has remained static or slightly declining, costs have increased considerably. The overall Consumer Price Index has increased 36% over the past 15 years, but highway construction costs have increased 94%. Since at least half of our costs are related to highway construction, we had at least a \$8.8 million shortfall in 2015 compared to our 2000 purchasing power. By 2018, that shortfall is expected to increase to \$10.2 million. We would need double our anticipated revenue in 2018.

| LUCAS COUNTY PAVEMENT INFORMATION | | |
|-----------------------------------|------------|------------|
| Pavement Rankings* | 2015 Miles | 2014 Miles |
| Best: No Work | 96.6 | 120 |
| Maintenance Work | 147.6 | 126.1 |
| Resurface | 59 | 55.7 |
| Poorest: Reconstruction | 0 | 1.6 |
| | 303.2 | 303.4 |

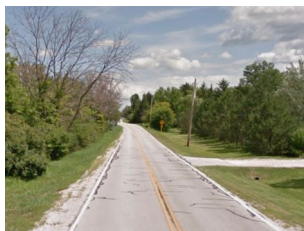
Includes Shared Roads with Other Jurisdictions

| Pavement Work | 2015 Miles | 2014 Miles |
|---|------------|------------|
| Crack Seal (Contract) | 42.3 | 30.5 |
| Surface Seal (Contract) | 18.6 | 10.0 |
| Resurfacing, Widening & Resurfacing or Reconstruction (Contract)* | 11.0 | 9.4 |
| TOTAL: | 71.9 | 49.9 |
| % of System (Overall) | 23.7% | 16.5% |

| Width Summary | % of System |
|--------------------|-------------|
| 24' Wide or more | 41.6% |
| 22' to 24' Wide | 20.1% |
| 20' to 22' Wide | 21.6% |
| 18' to 20' Wide | 14.7% |
| 16' to 18' Wide | 1.8% |
| Less than 16' Wide | 0.2% |

- Average Lucas County Road Width is 23.8 feet.
- Total lane miles is 656 +/-.
- Approximate travel lane surface area = 4,247,302 sq. yds.
- Approximate paved berm surface area = 730,202 sq. yds.
- Average Lucas County Maintained Road ADT is 2,610 vehicles per day +/-.
- 161.3 miles (53% of System) has paved asphalt berms.

Resurfacing Project



Brown Road (Short Rd-Nissen Rd)
Before

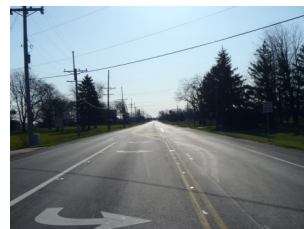
After



O.P.W.C. Resurfacing Project



Corduroy Road (Oregon Limit-
Decant Rd) Before



LUCAS COUNTY BRIDGE INFORMATION

| Summary of Structures Inspected By The Lucas County Bridge Engineer | | | | |
|---|-----------------------------|-------------------|--------------------|----------|
| Inspection, Inventory and Reporting by Lucas County | Category | Vehicular Bridges | Pedestrian Bridges | Culverts |
| | Lucas County Roads | 105 | 0 | 0 |
| | Township Roads | 57 | 0 | 0 |
| | BLCC Trails | 0 | 4 | 0 |
| | Metroparks | 3 | 4 | 0 |
| | Municipalities | | | |
| | Berkey | 3 | 0 | 0 |
| | Holland | 1 | 0 | 0 |
| | Maumee | 0 | 0 | 0 |
| | Ottawa Hills | 2 | 0 | 0 |
| | Oregon | 0 | 0 | 0 |
| | Sylvania | 0 | 0 | 0 |
| | Toledo | 3 | 0 | 0 |
| | Whitehouse | 0 | 0 | 0 |
| | Subtotals | 174 | 8 | 0 |
| Inventory by Others, Cursory Inspection by Lucas County | Municipal Trails | 0 | 1 | 0 |
| | County Roads over US23/I475 | 6 | 0 | 0 |
| | Municipalities | | | |
| | Toledo | 1 | 0 | 0 |
| | Whitehouse | 0 | 1 | 0 |
| | Subtotals | 7 | 2 | 0 |

| | | | |
|---------------|------------|-----------|----------|
| Totals | 181 | 10 | 0 |
|---------------|------------|-----------|----------|

| General Appraisal Rating | | | | |
|--------------------------|--------|-------------------|------|-----------------------|
| Type of Work | | Number of Bridges | | Change From Last Year |
| | | 2014 | 2015 | |
| | GAR | | | |
| None | 8 or 9 | 83 | 86 | Up 3 |
| Minor Maintenance | 7 | 43 | 42 | Down 1 |
| Major Maintenance | 5 or 6 | 35 | 35 | Down 2 |
| Major Rehabilitation | 3 or 4 | 8 | 6 | Down 2 |
| Critical Condition | 1 or 2 | 0 | 0 | None |
| Close to Traffic | 0 | 0 | 0 | None |
| TOTAL: | | 169 | 169 | |

| | Lucas County | Ohio's County Average (2014 Data) |
|--------------------------|-------------------|-----------------------------------|
| Bridges with Load Limits | 0.06% 1 of 169 | 6.6% 1,735 of 26,298 |

Lucas County has 1 bridge posted for a reduced load capacity compared to state wide average of 19.7 bridges per county.

Data includes 105 bridges on County Roads, 57 on Township Roads, 3 in Metroparks, and 4 on Bike Trails.

Bridge #543 on Centennial Road

Before



After



Bridge #1 on Fulton Lucas Road

Before



After



Bridge #4 on Washburn Road

Before



After



LUCAS COUNTY CULVERT INVENTORY

| Township / Location | Number on County/Bikeway Road System |
|---------------------|--------------------------------------|
| Harding | 12 |
| Jerusalem | 20 |
| Monclova | 35 |
| Providence | 28 |
| Richfield | 20 |
| Spencer | 21 |
| Springfield | 43 |
| Swanton | 12 |
| Sylvania | 43 |
| Washington | 2 |
| Waterville | 18 |
| Sub-Total : | 254 |
| Bike Trails | 19 |
| Total : | 273 |

| PHYSICAL CONDITION | | BIKE-TRAILS |
|--------------------|-----|-------------|
| Good | 243 | 16 |
| Fair | 6 | 1 |
| Poor | 5 | 2 |
| Critical | 0 | 0 |
| | 254 | 19 |
| Total : | 273 | |

Note:

The above numbers represent structures with spans greater than or equal to 2'; but less than 3' with both ends open, and spans greater than or equal to 3', but less than 10' regardless of open ends.

Culvert #159-Brint Rd. at Smith Ditch

Before



After

Culvert #239-King Rd. at Smith Ditch

Before



After

Lucas County Transportation Improvement District (LCTID)



As a result of an Ohio Department of Transportation request to local stakeholders on March 6th of 2014 for a local sponsor to advance potential interchanges along the I-475 corridor, and the input by these local stakeholders at meetings which followed this request, the Lucas County Engineer advanced the formation of a Transportation Improvement District (TID).

On April 22, 2014, the Lucas County Board of County Commissioners created the LCTID. Subsequently, on May 28, 2014, the Ohio Department of Transportation (ODOT) approved the TID registration. A TID is authorized under the *Ohio Revised Code* Chapter 5540 to finance, construct, maintain, repair, and operate street, highway, and other transportation projects, and in relation construct, alter, and repair roads, highways, and other related infrastructure and facilities. The TID enables various political subdivisions to participate and take advantage of the opportunities and benefits made available only through a TID. A TID is particularly effective on regional or multi-jurisdictional projects to deliver these projects in an efficient and cost-effective manner. Generally these improvements are driven by an economic development component.

LCTID Board members and contact information, meeting minutes, and project listings can be found via a link on the Lucas County Engineers website.

Two of the current projects include Dorr Street at I-475 and US 20A at I-475 interchanges. In 2015, Burgess & Niple, LLC completed an Alternative Evaluation Report at each location for the LCTID in cooperation with ODOT. This work has led to the initiation of engineering plans. Completion of the environmental and engineering plans through the stage 1 has been initiated by ODOT for the US 20A location. ODOT will lead the design phase for this location with the LCTID as a partner. The consulting team led by Arcadis has been selected and the work is underway. For the Dorr Street location, the LCTID will lead the design phase, a team led by Tetra Tech was selected, and the work has yet to be initiated. The LCTID also was successful in its presentation to TRAC in 2015 for funds (\$1.5 million at US 20A and \$2.3 million at Dorr Street) for State FY 2017 & 2018 to complete the design and right of way for these projects.

A third project with a more limited role for the LCTID contemplates certain public roadway and traffic system management improvements to Briarfield Blvd., Brandyway Lane, and Salisbury Road intersection in Monclova Township in conjunction with the new location for The Anderson's Inc. headquarters site. This is a joint project with Lucas County. In 2015, the right of way acquisition including tenant relocation for the apartment building was completed, the roadway and demolition plans were completed, and proposed signal poles ordered. The proposed roadway work should be constructed by early August of 2016.

Drainage Department

The Lucas County Commissioners, by resolution, approved the formation of the Lucas County Stormwater Utility on May 11, 2011. Monies were then assessed on tax duplicates to fund Ohio EPA's unfunded stormwater program mandates and capital improvement projects in the Phase II area as determined by the Stormwater Utility Board.

Approximately half of stormwater utility funding goes towards meeting unfunded Ohio EPA mandates associated with Lucas County being designated a Phase II Small MS4 Community. Lucas County along with 9 other communities within Lucas County are part of a joint permit, designed to meet 6 minimum control measures set by the Ohio EPA. The measures include: a public education program, a public involvement program, an illicit discharge detection and elimination program, construction site runoff program, post construction runoff control, and pollution prevention and good housekeeping program. Each year the Lucas County Engineer's office submits an annual report to Ohio EPA outlining what we have done to meet each of the minimum control measures. We plan to continue improving the quality of our water by meeting the Ohio EPA permit requirements and making drainage improvements in our Phase II Area. We plan on continuing our successful programs within our current budget.

GIS

Multi-jurisdictional Cooperation and Sharing of GIS Data and Services

In 2015, continued efforts were made by local governmental agencies, including the Lucas County Auditor's Office, the Lucas County Engineer's Office, Lucas County Emergency Services 9-1-1, the Lucas County Sanitary Engineer's Office, the City of Toledo, T.M.A.C.O.G., the Metroparks and various other agencies, to cooperate and share data and services relating to their respective Geographic Information Systems. Many "silos" (data storage locations) of disconnected data and services were being maintained in the past by each respective agency, which could mean, data that may not have been up to date in one agency's office respective to another agency's replicated or "mirrored" data. With the advent of the L.B.R.S. project in 2010, and the cooperation and sharing of this data to all the local agencies involved since that time, many benefits have resulted from these efforts, not only for the agencies maintaining their respective systems, but the citizens of Lucas County. Any of the now accessible online maps and data, being based on this one dataset, gives credence to a more accurate and up to date information system. A more recent example of these efforts, was the release of the updated Lucas County Auditor's AREIS system. Lucas County Emergency Services 9-1-1 has been utilizing this same information in their dispatch system. The Lucas County Engineer's Office, the Lucas County Sanitary Engineer's Office and the Lucas County Health Department have been sharing licensing and services to produce more cohesive maps for public use, all based on the same data foundation.

As we look towards the future, the goal of all agencies involved is to have in place a unified Geographic Information Systems platform that can be maintained, and dispersed to each agency from one location, thus allowing for better cooperation between users of the system, less repetitive input and maintenance of the data and services being used, and more of a "one-stop-shop" scenario for the benefit of the citizens of Lucas County.

AREIS Online
Auditor's Real Estate Information System

Summary
Map
Pictometry
Transfers
Values
Residential Attributes
Commercial Attributes
Land
Remarks & Splits
Permits
Current Taxes
Tax Distribution
By Fund
By Fund & Levy
Prior Taxes
Special Assessments
Payments

PARCEL ID: 7104301
MARKET AREA: 7002C
BOARD OF LUCAS COUNTY COMMISSIONERS
TAX YEAR: 2016

ASSESSOR#: 42033001
ROLL: RP_OH
1049 S MCCORD RD
STATUS: Active

Summary - General

| | |
|---------------------------|---|
| Tax District | HOLLAND VIL-SPRFLD LSD, POYSD |
| Class | EXEMPT |
| Land Use | 620 - E- EXEMPT PROPERTY OWNED BY COUNTIES |
| Market Area | 7002C - Click here to view map |
| Zoning Code | 24-M1 - Click here for zoning details |
| Zoning Description | Light Industrial |
| Water and Sewer | CITY WATER / CITY SEWER |
| Traffic | MAJOR ARTERY |
| Street Type | CONCRETE OR BLACKTOP |
| Owner | BOARD OF LUCAS COUNTY COMMISSIONERS |
| Property Address | 1049 S MCCORD RD HOLLAND OH 43528 |
| Mailing Address | ONE GOVERNMENT CTR #800 TOLEDO OH 43604 |
| Legal Desc. | 2.15 NW 1/4 SLY 34S 42 FT FRT NW 1/4 E 1/2 AC POE NEAR NW COR & EVC BRG POE LYING SLY S LINE SPECTRUM DR MEAS ELY 227 FT WLY 418.7 FT |
| Certified Delinquent Year | |
| PRO Codes | 0092 |

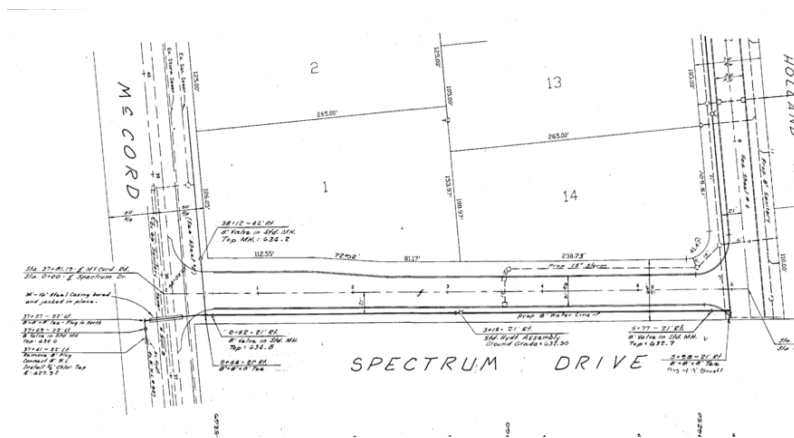


Lucas County Auditor's AREIS Online System

LCE - Public Utilities Map
Find address or place

Water Mains: 8.00

| | |
|----------------|---------------|
| Pipe_Ref | 2,015,967 |
| Diameter | 8.00 |
| Region | |
| Yr_Install | 1,989 |
| Yr_Revision | 1 |
| Project_No | 1337 |
| Drawing_No | 5 OF 6 |
| Drawing_No2 | |
| Log_No | |
| Comments | |
| Record_Drawing | More info |
| Polywrap | NO |
| Encasement | NO-ENCASEMENT |



Lucas County Engineer's & Sanitary Engineer's Public Utilities Map

Road Maintenance Department

Diagnostic Technology for Vehicle Maintenance

The vehicle diagnostic software that the mechanic staff had previously been using via a laptop and older wireless technology, has been upgraded to the latest cutting-edge diagnostic technology with two new devices. Using a county maintained wireless access point, the mechanics are able to roam freely from vehicle to vehicle to run their diagnostics and to download and update the diagnostic software on the devices when needed. Using these devices allows the mechanics to also make definitive decisions regarding a vehicle's road readiness and eliminates the need for the possibility of using an outside source to diagnose or fix a vehicle's mechanical problem. This saves invaluable time and expense for the County Engineer and makes the fleet of Road Maintenance vehicles and the County Engineer's pool cars more efficient to serve the public's well-being and their safety. Each device is specific for the purposes they are utilized for. The first device pictured below (left) is the Bosch ESI Tronic KTS Truck model, for diagnostics of heavy-duty trucks and vehicles that make up the majority of the Road Maintenance fleet. The Autel MaxiSys Pro, pictured below (right) for diagnostics of all other fleet and pool vehicles.



Bosch ESI Tronic KTS Truck



Autel MaxiSys Pro



Road Maintenance Snow Plow Rodeo

The Lucas County Road Maintenance Department held its Snow & Ice Season annual refresher on Thursday October 29th, 2015. The refresher re-acquaints the snow plow drivers with winter operations, procedures, updates on equipment and snow route changes.

In addition to the refresher, the Road Maintenance Department held a Snow Plow Rodeo for its drivers to compete in. The drivers had to maneuver through a series of obstacles trying not to hit any of them. One obstacle simulated plowing as close as possible to a mailbox without hitting it. Another simulated driving through a cul-de-sac and trying not to hit any of the barrels.

It had been several years since the department had a rodeo. The Labor Union had suggested to Keith Earley, the Lucas County Engineer to bring the event back. The obstacle course was planned by Dennis Boyle, Operations Officer. Mr. Boyle has had a long career in planning rodeos. This was his 30th rodeo that he had planned. He had previously planned rodeos for ODOT both local and State wide events as well as National Rodeos for the American Public Works Association (APWA).

Third place was awarded to **Jeff Morris**. Second place went to **Tim Durfey** and the event was won by **Eric Craft**. **CONGRATULATIONS** to the Winners!



1st Place—Eric Craft



2nd Place—Tim Durfey



3rd Place—Jeff Morris

Traffic Safety in Lucas County

On April 20, 2016, I was out taking pictures for this Annual Report. It was about 11 a.m. and I was heading south on Centennial Road, in one of the County Engineer's fleet vehicles, towards the new roundabout that was completed at Dorr Street and Centennial Road. Just north of the roundabout, there is a bend in the road that, as you are heading south, cuts off your view of the roundabout and oncoming traffic. I spotted a car off on the right shoulder without its hazard lights flashing, and Lucas County citizen Sally Gopp. I went past the vehicle, proceeded to the roundabout, and made a complete turnaround through the roundabout, and headed back north on Centennial Road to give assistance. Within a few minutes, Lucas County Deputy Sheriff Dan Garner showed up. We had Ms. Gopp back on the road within 10-15 minutes.



Looking south on Centennial Road
at the location



Lucas County Deputy Sheriff
Dan Garner changing the tire



Lucas County Deputy Sheriff
Dan Garner & Sally Gopp

According to the Federal Highway Administration, every year there are roughly 4,000 pedestrian fatalities, accounting for 12% of all traffic fatalities and 59,000 pedestrian injuries from roadway crashes. Practicing smart roadside safety techniques can help prevent you from becoming an unfortunate statistic.

Move to Safety

Never get out of the vehicle to make a repair or examine damage on a busy highway. Get the vehicle to a safe, out-of-the-way spot, and then get out of the car. If you've been in an accident, motion for the other driver to do the same.

If you have a tire blowout or a flat, good roadside safety calls for moving your vehicle to a safer place out of harm's way before attempting a repair, even if it means destroying the wheel. The cost of a new tire, rim or wheel is well worth it when it means ensuring your safety.

Call for Help

If your car won't run or if it's so badly damaged that it can't be driven, stay in the vehicle and use a cell phone to call for help. Don't stand outside the vehicle in the flow of traffic. If you break down in a dangerous area, call the police and stay in your car with the doors locked until help arrives.

Be Prepared

Carry flags, flares or reflective triangles in your vehicle so you can mark your location in the event of an emergency, even during the day. **Remember to turn on your hazard lights so that other drivers have advanced warning of a problem ahead.**

Be sure to always carry roadside safety kits for emergencies.

Your kit should include:

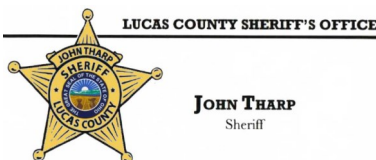
- Jumper cables
- Canned instant tire inflator
- Heavy-duty rope
- Gloves and warm blanket (winter breakdowns)
- First aid kit

2014 Crash Stats for Lucas County

(Source: Ohio Dept. of Public Safety)

| <u>Total Crashes</u> | <u>Pedestrian Related</u> |
|------------------------|---------------------------|
| Injury: 3,651 | Injury: 98 |
| Property Damage: 9,236 | Property Damage: 7 |
| Fatal: 37 | Fatal: 6 |

The Lucas County Sheriff's Office and the Lucas County Engineer's Office is committed to providing safety and protection for the well-being of the citizens of Lucas County through road improvements and public service.



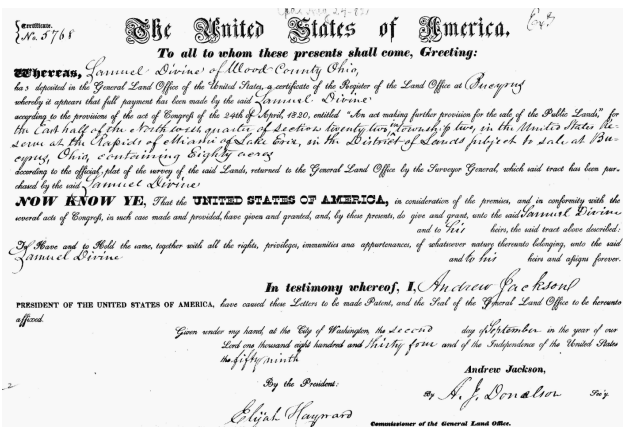
Locating History...

The First Surveyor of Lucas County

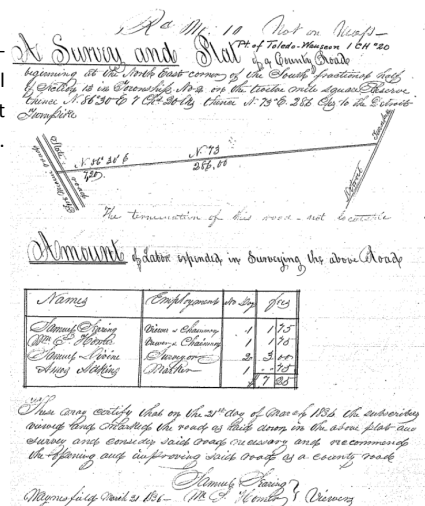
The Lucas County Engineer's Office celebrated it's 80th year in 2015. Prior to the establishment of the Office of the Lucas County Engineer in 1935, the official title of the position held in this office was known as the Lucas County Surveyor, established in 1835. This position was first held by Samuel Divine. Samuel Divine was born on April 16, 1809 in Sterling, Cayuga Co., New York. He was the son of Captain Joseph F. Divine (War of 1812, Divine's Co., N.Y. Militia), and Esther Wilmarth. The Joseph Divine family relocated from NY to Lucas Co. in 1833, then two of Samuel's brothers went to Hillsdale Co., MI in 1841. Their mother and father followed them in 1843. The Divine family were early settlers of Lucas County, located in, what is now Springfield Township prior to its organization. Five of Samuel's brothers, John, Joseph, Asa, Selah and Daniel also lived in Springfield Township. Samuel was the first official surveyor of Lucas County, serving from 1836 to 1838, and as such, laid out the town of Vinton in what was Adams Township, the town of Sylvania, and the town of Monclova. He also served as what, at the time was known as a Viewer. A Viewer was an individual that was appointed by the County Commissioners to oversee and help with the survey of any proposed roads. Viewers were made up of 2 to 3 appointed individuals, who typically doubled as chainmen or markers, as the survey was being performed. The viewers would then make an official report back to the commissioners, reporting on any possible detriment or damage that the proposed road may cause any one town or the well-being of citizens. They would then make recommendations to the commissioners to have the survey adjusted if they believed it necessary. From 1841 to 1844 Samuel was the Springfield Township Clerk, and in 1843 was a delegate to the county convention of the Whig party. He was also a Lucas County Commissioner from 1849 to 1853, and served several terms as a justice of the peace.

"In accordance with the act of the Board of County Commissioners, erecting the Township of Springfield, the first election for civil officers was held at the house of William Ford, October 8, 1836. March 5, 1838, the Trustees, James Egnew, John Birchfield and Patrick Flynn, settled with the Supervisors of Highways. No charges were made for services. April 2, 1838, the electors of the Township held their annual election at the house of Samuel Divine."

Sometime between 1860 and 1870, Samuel Divine relocated his family to Woodbridge Twp., Hillsdale Co., MI. He probably did so to be nearer the rest of his brothers and other family, or perhaps, due to the Civil War. Samuel passed away on the 31st of May, 1885 and is buried in the Divine Cemetery, Woodbridge Twp., Hillsdale Co., MI. His brother, Selah passed away in Springfield Twp., Lucas Co., OH in 1854 and is buried with other members of the Divine family in the Springfield Cemetery.



Pictured Right—Typical Road Survey & Plat-dated in March of 1836. Surveyed by Samuel Divine. It is a portion of what is now Airport Hwy. between Eastgate and Detroit Ave.



Pictured Left—U.S. Land Office Certificate certifying by an 1820 Act for the Sale of Public Lands. Samuel Divine of Wood Co. purchasing 80 acres in Bucyrus, Ohio, dated Sept. 2, 1834, approved and signed by President of the United States, Andrew Jackson. (Joseph Divine, Samuel's father, made a similar purchase on the same date).

Main Office Employees

Josh Hazard - 20 Years

Joel Palermo - 20 Years

Tina Richey - 20 Years

Joe Shultz - 15 Years

Kara Moore - 10 Years

Kyle Warner - 10 Years

SERVICE AWARDS

21

Road Maintenance Employees

Eric Craft - 20 Years

Tim Durfey - 20 Years

Galen Molnar - 30 Years

LUCAS COUNTY OHIO

Keith G. Earley

Lucas County Engineer, P.E./P.S.

<http://co.lucas.oh.us>



*Engineering safety today
for a better tomorrow*

STAFF DIRECTORY

LUCAS COUNTY ENGINEER

Keith G. Earley, P.E., P.S. 213-2839

ADMINISTRATION

| | | |
|-----------------------|-------------------|----------|
| Administrative Deputy | Mark Drennen, MPA | 213-2851 |
| Clerical Supervisor | Missy Dixon | 213-2848 |
| Account Specialist | Kara Moore | 213-2849 |
| Account Specialist | Kimberly Kettman | 213-2892 |

ROAD MAINTENANCE DEPT.

| | | |
|--------------------------|---------------|----------|
| Superintendent | Greg Wimberly | 213-2890 |
| Assistant Superintendent | Ryan Belinski | 213-2891 |
| Operations Officer | Dennis Boyle | 213-2879 |
| Road Foreman | John Bowser | 213-2879 |

M.P.A. Masters of Public Administration

P.E. Professional Engineer

P.S. Professional Surveyor

E.I. Engineer Intern

DESIGN, CONSTRUCTION & TRAFFIC STAFF

| | | |
|---------------------------|-----------------------|----------|
| Chief Deputy Engineer | Jeffery Lohse, P.E. | 213-2858 |
| Bridge Engineer | Bryan Zienta, P.E. | 213-2859 |
| Chief Surveyor | Denny Pritscher, P.S. | 213-2834 |
| Construction Engineer | Joel Palermo, P.E. | 213-2840 |
| Const. Project Supervisor | Joshua Hazard, E.I. | 213-2841 |
| Design Engineer | Patrick O'Boyle, P.E. | 213-2855 |
| Drainage Engineer | Brian W. Miller, P.E. | 213-2830 |
| Drainage & GIS | Robert Neubert | 213-2832 |
| Planning Engineer | Doug Parrish, P.E. | 213-2856 |
| R/W Coordinator | Joe Shultz | 213-2864 |
| Tax Map Supervisor | Kelly Forgette | 213-4652 |
| Township Engineer | Sarah Rowland, P.E. | 213-2857 |
| Traffic Operations Eng. | Ronald Myers, P.E. | 213-2854 |
| Traffic Design Engineer | Kyle Warner, P.E. | 213-2875 |

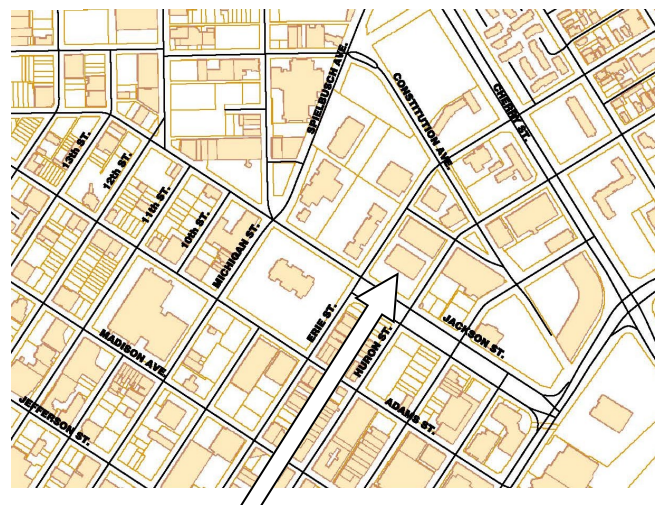
RECORDS DEPT.

| | | |
|---------------------|-----------------|----------|
| Records/IT/CAD Mgr. | Brian S. Miller | 213-2852 |
|---------------------|-----------------|----------|

Office Locations



Lucas County Public Works Complex
Lucas County Engineer's Office
1049 South McCord Road
Holland, Ohio 43528
419-213-2860



Lucas County Engineer's Tax Map Dept.
One Government Center, Suite 770,
Toledo, Ohio 43604-2258
419-213-4652

